

NOTES ON THE GENUS *MACRORHOPTUS* LECONTE

(COLEOPTERA: CURCULIONIDAE, ANTHONOMINAE)

16. A contribution to the knowledge of the Curculionoidea.

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During the past few years a number of the members of the genus *Macrorhoptus* LeConte have been sent to the author in material for identification. Two new forms were found and they are herewith published.

No work has been done on this genus since 1908, when Pierce described *M. sphaeralciae* very briefly. *Macrorhoptus* was described by LeConte in 1876, with *M. estriatus* LeConte the genotype. In 1891, Dietz described an additional species, *M. hispidus*. In 1916, Blatchley and Leng mentioned *M. estriatus* from the area covered by that work.

It is interesting to note that the above named workers, with the exception of Pierce, redescribed the genus in their works noting that the antennal funicle was 6-segmented. However, careful examination shows that the funicle is actually 7-segmented. In all species, with the exception of *sidalceae*, it is clearly evident with careful study. In *M. sidalceae* it is evident on the inner side of the funicle. The seventh segment is very short and wide and might appear, at a glance, to be a segment of the club; but careful examination will disclose that it is actually the last funicular segment.

All measurements of body length were taken from the dorsal view, beginning at the anterior margin of the eyes and extending to the apices of the elytra. Measurements of the rostrum were made from the lateral view along the chord of the dorsal side, from the basal impression or upper margin of the eye to the apical end of the rostrum with the mandibles in a closed position. Those of the pronotum are along the median line. The term pronotum is applied to the disc of the prothorax. In all, 256 individuals have been examined.

Macrorhoptus LeConte

Macrorhoptus LeConte, 1876, p. 208; Dietz, 1891, p. 184; Blatchley and Leng, 1916, p. 284.

Rostrum stout, cylindrical, about as long as prothorax; nearly straight, except at base, and densely scaly. Scrobes oblique, directed beneath the eyes, beginning near apical fourth to two-fifths. Antennae inserted at or near apical fourth to two-fifths. Scape short, stout, gradually widening to apex. Funicle 7-segmented; first funicular segment robust, 2-7 gradually wider, seventh subcontiguous to the club; each segment with whorls of numerous stiff clavate scales. Eyes transversely oval. Head convex, punctured and coarsely pubescent; front with or without a fovea. Prothorax wider than long, narrowed apically; sides nearly straight behind, and frequently rounded in front; apical margin emarginate laterally giving rise to the appearance of feeble postocular lobes. Elytra oblong, very little wider at base than the prothorax; sides nearly parallel, broadly and conjointly rounded at apex, which covers the pygidium completely. Striae almost obsolete; disc of elytra densely punctured, each puncture bearing a scale. Ventral segments rather subequal, third and fourth a little shorter than the others. Legs moderately long; femora feebly clavate, anterior pair armed with a long triangular tooth, middle and posterior pair nearly mutic. Tibiae gradually widened apically; outer angle rounded; anterior feebly curved, middle and posterior pair straight, all armed with a small hook at apex. Tarsi moderately stout, posterior pair more slender, third segment bilobed. Claws armed with a long slender tooth.

In general facies the species resemble in form certain species of *Magdalis*.

Schenkling and Marshall, in the Coleopterorum Catalogus (1934), placed the genus behind *Pseudanthonomus* Dietz, probably on the strength of the original description only, and most likely by virtue of the supposed 6-segmented funicle and the scrobes passing below the eyes.

It would seem that *Macrorhoptus* was more properly placed by Dietz next to *Tachypterellus* in a group made up of *Anthonomopsis*, *Nanops*, *Chelonychus* and the two aforementioned genera, all of which have the middle coxae separated by the mesosternum, posterior tibiae with a small hook and the claws toothed.

Key to the Known Species of MACRORHOPTUS LeConte

1. Scaly vestiture on elytra without intermixed erect or semierect clavate bristles. 2
- 1'. Scaly vestiture on elytra with intermixed erect or semierect clavate bristles. 3
2. Scales on rostrum more or less prostrate, broadly oval, those on "ocular lobes" broadly oval; Texas and California. *estriatus* LeConte
- 2'. Scales on rostrum erect, elongate and narrowly clavate, those of "ocular lobes" elongate, narrowly clavate; British Columbia. *sidalceae*, new species
3. Prostrate scales on disc of elytra longitudinally striate, for the most part. 4
- 3'. Prostrate scales of disc of elytra not striate at all; smaller and paler species; Texas. *sphaeralciae* Pierce
4. Scales of elytra prostrate, having a smoothly, evenly placed appearance; rostrum of female short and stout (fig. 6), aedeagus as in figures 13 and 15; Arizona. *hispidus* Dietz
- 4'. Scales of elytra very grizzled, being roughened in appearance; rostrum of female elongate and cylindrical (fig. 8); aedeagus as in figures 12 and 14; California. *griseus*, new species

***Macrorhoptus estriatus* LeConte**

Figures 1 and 2

Macrorhoptus estriatus LeConte, 1876, p. 209; Dietz, 1891, p. 185; Blatchley and Leng, 1916, p. 284.

Distribution.—Texas: Hallettsville, Victoria (USNM); Goliad, Sonora and Van Horn (ELS). California: Winterhaven. Also recorded from Illinois and Kansas. 151 examples.

This species has been reported to breed in the seed capsules of *Callirrhoe involucrata* by Pierce in Texas.

***Macrorhoptus sidalceae*, new species**

Figures 10 and 11

Male.—Elongate-oblong; black with the antennal funicle, tibiae and tarsi reddish brown; densely clothed with brownish and brownish yellow prostrate, clavate, striate seta-like scales; those of rostrum erect, elongate and narrowly clavate.

Rostrum very feebly curved, a little longer than prothorax, stout, rather finely and very densely punctured, the apical fourth more sparsely punctured and feebly shining. Antennae inserted basad of apical fourth; scape not attaining eye; funicle sparsely clothed with narrow clavate scales; first funicular segment very robust, longer than second, second as long as following two united, three to five subequal, gradually wider, six and seven very short and wide, the seventh contiguous to club. Club short, oval-acuminate and densely clothed with fine setae. Head rather finely and closely punctured. Eyes large and coarsely granulate.

Prothorax more than one-half wider than long, the base one-half wider than apex, apex feebly sinuate at middle, sides feebly arcuate, convergent from base to apex, apex but feebly constricted; pronotum coarsely and densely punctured, each with a narrow clavate scale; flanks more densely punctured. Scutellum rounded.

Elytra one and one-half longer than wide, three times longer and one-third wider than prothorax; humeri rectangular; sides feebly arcuate to apical third then strongly rounded to apex; base bisinuate; striae not impressed, rows of striae punctures indefinable due to the dense, coarse punctures of the intervals; intervals between punctures strongly alutaceous; scaly vestiture prostrate and rather sparse.

Ventral side with pro-, meso-, and metasternum and abdominal sternites coarsely punctured, the punctures a little finer on the abdominal sternites; densely clothed with intermixed clavate and seta-like scales. Fifth abdominal sternite shorter than three and four together, truncated apically, the vestiture finer and a little more erect, first two abdominal sternites feebly impressed

or concave at middle. Legs as in *estriatus*. Claws slender and with a long slender tooth. Length 2.4 mm., width 1.2 mm.

Female.—Rostrum narrower, more slender and thus appearing longer than in male, but scarcely so in relation to the prothorax, a little more sparsely and finely punctured. Otherwise not differing notably from the male. Length 2.5 mm., width 1.5 mm.

Type locality.—Sea Island, Vancouver, British Columbia.

Type material.—Holotype (#86), male, allotype, female, and two paratypes in (ELS); 10 paratypes in the collection of G. Stace Smith, all from the type locality, XI-10-54, C. L. Plummer. Length of paratypes 2.2–2.6 mm., width 1.2–1.5 mm.

The type material was bred from the seeds of *Sidalcea hendersoni*.

This seems to be nearest *M. estriatus* LeConte, but differing from that in the erect, elongate, narrowly clavate scales on the rostrum, the elongate, narrowly clavate scales on the "ocular lobes" and in the shape of the female rostrum.

Macrorhoptus sphaeralciae Pierce

Figures 3 and 4

Macrorhoptus sphaeralciae Pierce, 1908, p. 173.

Distribution.—Known only from Texas: Presidio (USNM, ELS), Devils River (type locality) (USNM); Radford and Barrel Ranch (ELS). All material was collected in April-June. 18 examples.

Reared from the seed capsules of *Sphaeralcia angustifolia* from Devils River.

This is the smallest of our species and is quite distinctive in its paler body coloration, and the pale yellow, non-striate elytral scales.

Macrorhoptus hispidus Dietz

Figures 6, 7, 13 and 15

Macrorhoptus hispidus Dietz, 1891, p. 185.

Distribution.—Arizona: Williams (type locality) (USNM); Constellation, Prescott, Perkinsville and Arlington (ELS). 72 examples.

Macrorhoptus griseus, new species

Figures 8, 9, 12 and 14

Male.—Elongate-oblong, robust, black with mandibles, antennae, tibiae, and tarsi reddish brown; very densely clothed with intermixed tan, brown and white striate scales and brown erect seta-like scales, the head, rostrum and prothorax clothed mostly with brown scales, the prothorax with a wide line of white scales each side of pronotum, elytra clothed with a grizzled

EXPLANATION OF FIGURES IN PLATE

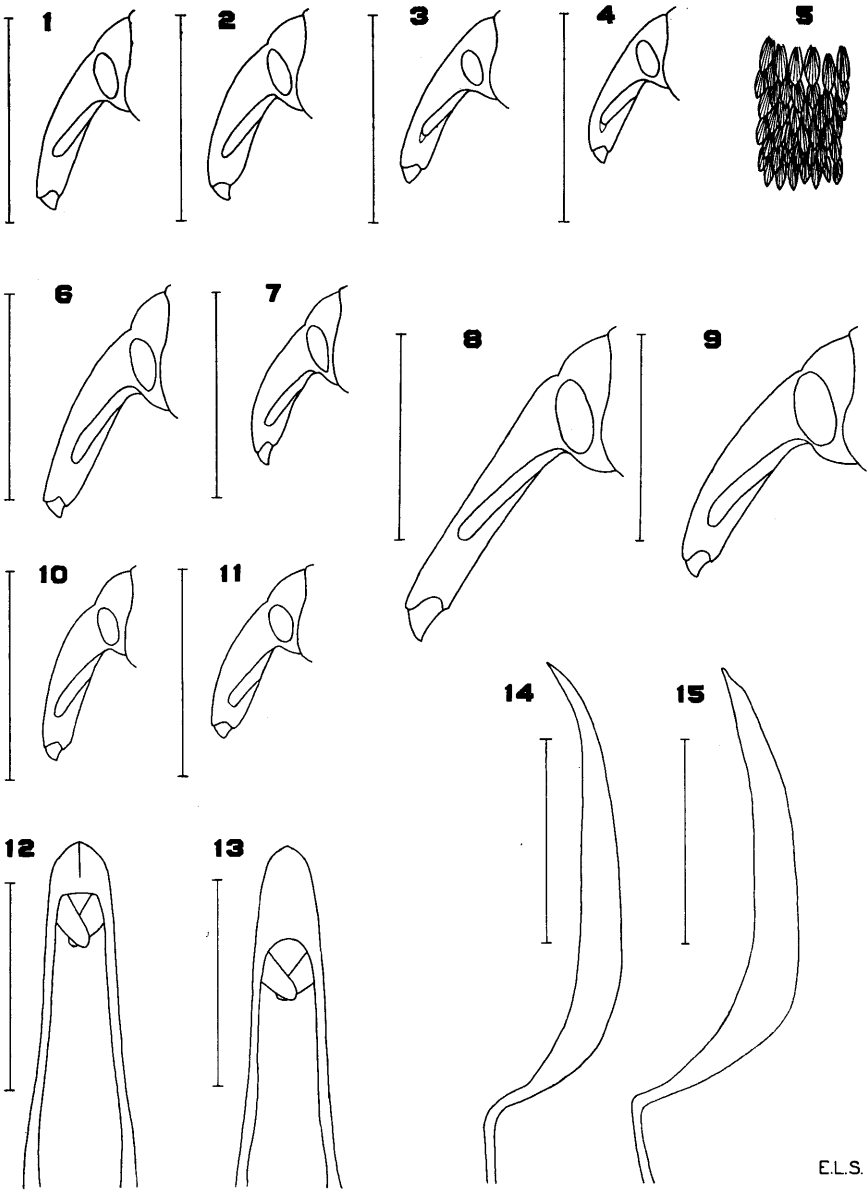
1. Lateral outline of rostrum of *Macrorhoptus estriatus* LeConte, female, Texas.
2. Same of male, Texas.
3. Same of *M. sphaeralciae* Pierce, female, Texas.
4. Same of male, Texas.
5. Illustration of longitudinally striate scales.
6. Lateral outline of rostrum of *M. hispidus* Dietz, female, Williams, Arizona.
7. Same of male, Williams, Arizona.
8. Same of *M. griseus*, n. sp., female, allotype.
9. Same of male, holotype.
10. Same of *M. sidalceae*, n. sp., female, allotype.
11. Same of male, holotype.
12. Dorsal outline of apical area of aedeagus of *M. griseus*, n. sp., holotype.
13. Same of *M. hispidus* Dietz, Williams, Arizona.
14. Lateral outline of major portion of aedeagus of *M. griseus*, n. sp., holotype.
15. Same of *M. hispidus* Dietz, Williams, Arizona.

Figures 1 to 4, 6 to 10. Line = 1 mm.

Figure 5 90x

Figures 12 and 14. Line = $\frac{1}{2}$ mm.

Figures 13 and 15. Line = $\frac{1}{4}$ mm.



mixture of tan, brown and white broad, oval, overlapping scales, the brown seta-like scales in a single row on each elytral interval; abdominal sternites and legs clothed with white scales.

Rostrum as long as prothorax along midline, nearly straight, stout, very closely, coarsely, deeply punctured, except at apex, where the punctures are finer and sparser. Antennae inserted at apical fourth. Scrobes deep, linear, directed beneath the lower angle of the eye. Antennal scape slightly curved, bare, except for an occasional clavate scale; funicle sparsely clothed with erect seta-like scales; first segment robust, about one and one-half times longer than second, nearly as long as next two combined, second nearly twice as long as third, third to fifth subequal gradually wider, sixth and seventh shorter. Club elongate oval, as long as preceding four funicular segments combined; moderately clothed with fine setae. Eyes large, oval, finely granulate. Head rounded, coarsely, deeply, densely punctured, the punctures becoming fine striae on sides of head behind eyes.

Prothorax one and one-third times wider than long, the sides feebly rounded, gradually convergent from base to apex; base twice as wide as apex, base truncated, apex feebly constricted, apical margin strongly bisinuate; pronotum slightly convex, coarsely, densely, deeply punctured, the punctures very narrowly separated; each puncture with either a broad elongate scale or an elongate-narrow scale; flanks more densely punctured. Scutellum rounded, deeply, densely punctured.

Elytra broadly oval, about one and one-half times longer than wide, two and two-thirds times longer than prothorax, one and one-third wider than prothorax; humeri rectangular; sides very feebly arcuate, almost parallel in basal two-thirds, thence strongly rounded to apex; base feebly bisinuate; striae, with the exception of the first, not impressed, the first deeply impressed to beyond middle, rows of striae punctures indefinable due to the dense coarse punctures of the intervals; the intervals between the punctures very feebly alutaceous.

Ventral side with pro-, meso-, and metasternum very coarsely deeply, densely punctured, those of the abdominal sternites smaller and not so well defined, a little sparser; vestiture of intermixed broad oval-elongate scales and prostrate seta-like scales, except along the apical margin of the fifth abdominal sternite which has a denser patch of erect seta-like scales. Fifth abdominal sternites shorter than preceding two combined, apex truncate. First two abdominal sternites feebly concave at middle. Legs as in *hispidus*. Claws with a long slender tooth. Length 3.8 mm., width 1.8 mm.

Female.—Rostrum one-third longer than prothorax, very straight, slender and cylindrical. Apical area anterior to antennal insertion more finely punctured. Antennae inserted at apical third. The first and second abdominal sternites more convex than in the male. Otherwise not differing notably from the male. Length 4.2 mm., width 2.0 mm.

Type locality.—Chocolate Mountains, California.

Type material.—Holotype (#87), male, and allotype, female, in (ELS); one male paratype in the collection of C. A. Frost; all material from the Chocolate Mountains, California, IV-9-39, R. P. Allen. Length of paratype 3.6 mm., width 1.75 mm.

This species differs from *hispidus* by the characters set forth in the key, the grizzled, roughened appearance the longer more cylindrical rostrum of the female and the form of the aedeagus.

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